San Bernardino County

Progress Toward Achieving Year 2000 Maternal and Child Health Objectives



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INTRODUCTION

The purpose of this report is to describe San Bernardino County's progress toward meeting specific Year 2000 Objectives in the maternal and child health area. Selected maternal and child health variables were examined. Where possible, State data was used for comparison. The following health status objectives were reviewed.

- Reduce the infant mortality rate to no more than 7 per 1,000 live births.
- Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births.
- Reduce the neonatal mortality rate to no more than 4.5 per 1,000 live births.
- Reduce the neonatal mortality rate among blacks to no more than 7 per 1,000 live births.
- Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.
- Reduce the postneonatal mortality rate among blacks to no more than 4 per 1,000 live births.
- Reduce the fetal death rate (20 or more weeks gestation) to no more than 5 per 1,000 live births plus fetal deaths.
- Reduce low birthweight to an incidence of no more than 5 percent of live births and very low birthweight to no more than 1 percent of live births.
- Reduce low birthweight among blacks to an incidence of no more than 9 percent and very low birthweight among blacks to no more than 2 percent.
- Increase to at least 90 percent the proportion of very low birthweight infants born in tertiary level (III) hospitals.
- Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.
- Increase to at least 90 percent the proportion of all black and Hispanic pregnant women who receive prenatal care in the first trimester of pregnancy.
- Reduce the maternal mortality rate to no more than 3.3 per 100,000 live births.
- Reduce deaths among children and youth through age 24 caused by unintentional injuries by at least 15 percent.
- Reduce suicides among youth aged 15 through 19 to no more than 8.2 per 100,000 youth.
- Reduce by at least 30 percent the proportion of youth aged 12-21 who contract sexually transmitted diseases.

Data used to calculate infant mortality rates were extracted from the California Birth Cohort files acquired from the California Department of Health Services. These files consist of linked birth and death records. Race/ethnicity references in the infant mortality section refer to the race/ethnicity of the mother on the birth record. It is important to note that the Department of Health Services updates the cohort files as new information is obtained. Consequently, figures shown in this report may differ slightly from figures published by various Department of Health Services agencies. The data and rates in this report were compiled and calculated by San Bernardino County, Department of Public Health, Program Analysis and Statistics.

Ninety-five percent of San Bernardino County's live births for the review period are from the three mutually exclusive groups: black, non-Hispanic; Hispanic; and white, non-Hispanic; therefore, other race groups were not analyzed due to the small number of events. Throughout this report these three groups are referred to as black, Hispanic and white, respectively.

INFANT MORTALITY

In this section of the report infant mortality rates were reviewed by age of infant (i.e. neonatal and post-neonatal) and race/ethnicity of mother, for the ten year period from 1983 to 1992. An infant death is a death occurring during the first year of life; a neonatal death is a death occurring during the first 27 days of life; and a postneonatal death is a death occurring between the 28th day of life and the first year.

The number of live births used to calculate the infant mortality rates are shown below in Table 1 by race/ethnicity of mother. Infant deaths and rates are shown in Tables 2 (overall infant mortality), 3 (neonatal mortality), and 4 (postneonatal mortality). Data for the State of California and San Bernardino County are shown in each table with race/ethnicity detail for comparison between State and County and among race/ethnicity groups.

The number of live births to California residents increased 38 percent over the ten-year review period. During the same period live births to black mothers increased 25 percent; live births to white mothers only increased 2 percent; and live births to Hispanic mothers increased 100 percent. During the same decade live births to San Bernardino County residents increased 72 percent. Live births to San Bernardino County blacks, whites and Hispanics increased 138, 26, and 188 percent, respectively.

Table 1
Live Births by Race/Ethnicity of Mother
California and San Bernardino County, 1983-1992

					Yea	ar				
Race/Ethnicity	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
California										
Total	435,779	447,351	470,818	482,102	503,563	532,799	569,303	611,934	609,453	600,860
Black	36,426	38,285	39,860	41,383	43,205	45,274	47,598	48,198	46,831	45,530
Hispanic	131,511	136,893	149,161	156,478	166,106	182,930	211,656	245,408	257,906	263,329
White	223,999	226,966	234,489	235,916	242,081	247,818	252,649	256,652	242,645	228,444
Other	43,843	45,207	47,308	48,325	52,171	56,777	57,400	61,676	62,071	63,557
San Bernardino Co	ounty									
Total	19,051	19,940	21,277	22,599	25,524	28,012	30,582	33,402	33,032	32,812
Black	1,324	1,491	1,607	1,827	2,171	2,505	2,788	2,859	3,106	3,145
Hispanic	4,560	4,754	5,336	5,835	6,815	7,978	9,539	11,032	12,544	13,114
White	11,695	12,688	13,355	13,947	15,433	16,223	16,791	17,929	15,666	14,736
Other	1,472	1,007	999	990	1,105	1,306	1,464	1,582	1,716	1,817

Overall Infant Mortality

Year 2000 Objective: Reduce the infant mortality rate to no more than 7 per 1,000

live births.

1992 Infant Mortality Rate: San Bernardino County 8.9

California 7.0

San Bernardino County's infant mortality rate was higher than the State each year of the 10 year review period (Figure 1). The State rate declined from a high of 9.8 infant deaths per 1000 live births in 1983 to 7.0 in 1992, a 28.6 percent decline. Over the same period, San Bernardino County's rate declined 19.1 percent, from 11.0 to 8.9.

With an infant mortality rate of 7.0 the State achieved the Year 2000 Objective in 1992. Of course it is possible the rate will fluctuate and move above the 7.0 level, but the ten year trend for the state is clearly downward. The trend for San Bernardino County, is not so obvious, but appears to be declining.

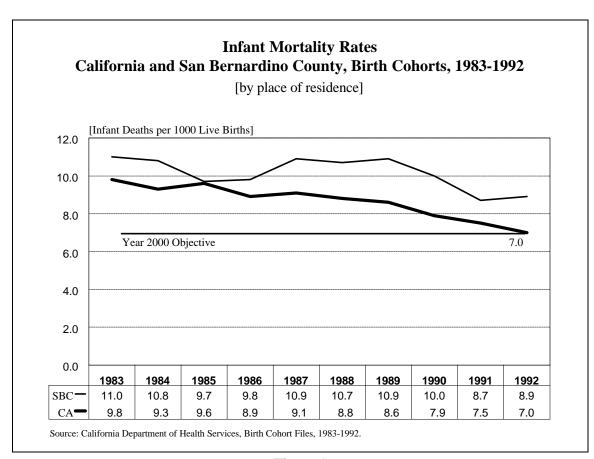


Figure 1

Overall Infant Mortality by Race/Ethnicity of Mother

Year 2000 Objective: Reduce the infant mortality rate among blacks to no more than

11 per 1,000 live births.

1992 Black Infant Mortality Rate: San Bernardino County 14.9

California 15.6

The Year 2000 Objective for blacks may not be met by either California or San Bernardino County based on a review of the data presented in Figure 2. San Bernardino County's black infant mortality rate declined 21.2 percent between 1983 and 1992. The State rate declined 17.9 percent. More than likely, the small number of black infant deaths accounted for the erratic pattern for the County.

The County infant mortality rate among Hispanics declined 22.7 percent from 1983 to 1992, while the State rate declined 23.5 percent (Figure 3). During the last seven years of the review period, the County infant mortality rate among Hispanics exceeded the State rate. From 1983 to 1992, the rate among whites declined 32.6 and 24.8 percent for California and San Bernardino County, respectively (Figure 4). The downward trend for both the State and the County infant mortality rates among whites is evident. Infant deaths and rates are shown below in Table 2. (Use caution interpreting rates calculated from small numbers of events.)

Table 2
Infant Deaths and Infant Mortality Rates by Race/Ethnicity of Mother
California and San Bernardino County, 1983-1992

Year		I	nfant Deaths	3			Infa	nt Mortality	Rate	
	Total	Black	Hispanic	White	Other	Total	Black	Hispanic	White	Other
California										
1983	4,249	692	1,121	2,052	384	9.8	19.0	8.5	9.2	8.8
1984	4,166	648	1,146	1,942	430	9.3	16.9	8.4	8.6	9.5
1985	4,542	716	1,297	2,072	457	9.6	18.0	8.7	8.8	9.7
1986	4,314	735	1,201	1,980	398	8.9	17.8	7.7	8.4	8.2
1987	4,594	792	1,307	2,051	444	9.1	18.3	7.9	8.5	8.5
1988	4,669	837	1,449	1,944	439	8.8	18.5	7.9	7.8	7.7
1989	4,910	859	1,642	1,945	464	8.6	18.0	7.8	7.7	8.1
1990	4,859	777	1,797	1,857	428	7.9	16.1	7.3	7.2	6.9
1991	4,555	723	1,822	1,620	390	7.5	15.4	7.1	6.7	6.3
1992	4,235	709	1,703	1,414	409	7.0	15.6	6.5	6.2	6.4
San Bernard	lino County									
1983	210	25	40	127	18	11.0	18.9	8.8	10.9	12.2
1984	215	18	38	139	20	10.8	12.1	8.0	11.0	19.9
1985	207	27	40	129	11	9.7	16.8	7.5	9.7	11.0
1986	222	34	46	135	7	9.8	18.6	7.9	9.7	7.1
1987	279	49	63	150	17	10.9	22.6	9.2	9.7	15.4
1988	300	49	71	162	18	10.7	19.6	8.9	10.0	13.8
1989	333	53	95	170	15	10.9	19.0	10.0	10.1	10.2
1990	333	54	93	164	22	10.0	18.9	8.4	9.1	13.9
1991	288	57	97	119	15	8.7	18.4	7.7	7.6	8.7
1992	291	47	89	121	34	8.9	14.9	6.8	8.2	18.7

Note: Rates calculated with fewer than 20 events are considered unreliable and should be interpreted with caution.

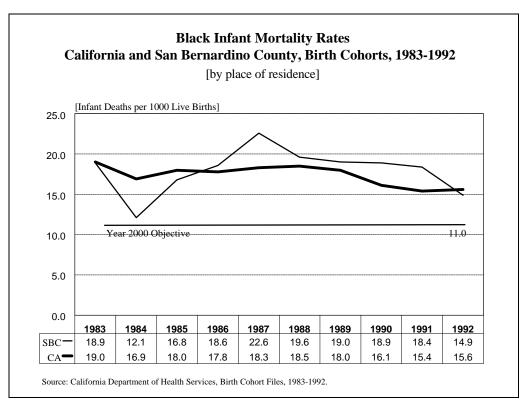


Figure 2

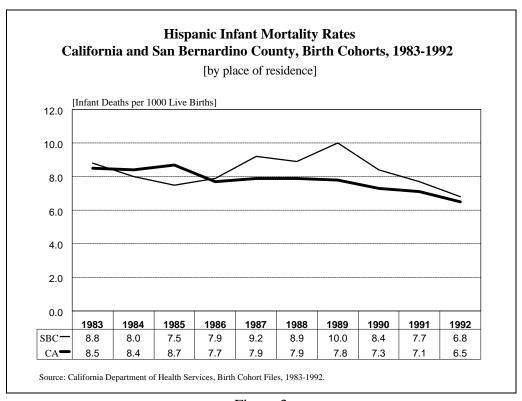


Figure 3

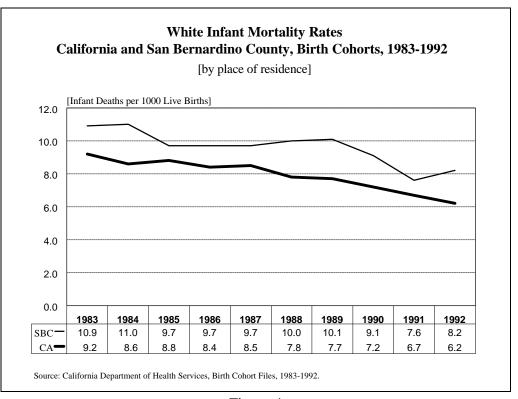


Figure 4

Neonatal Mortality

Year 2000 Objective: Reduce the neonatal mortality rate to no more than 4.5 per

1,000 live births.

1992 Neonatal Mortality Rate: San Bernardino County 5.4

California 4.3

Both the State and the County experienced downward trends in neonatal mortality between 1983 and 1992 (Figure 5). The State trend is more obvious. During the ten-year review period California's and San Bernardino County's neonatal mortality rates dropped 31.7 and 22.9 percent, respectively. San Bernardino County's rate was higher than the State rate every year except 1985. With a rate of 4.3 in 1992, the State rate was just below the Year 2000 Objective.

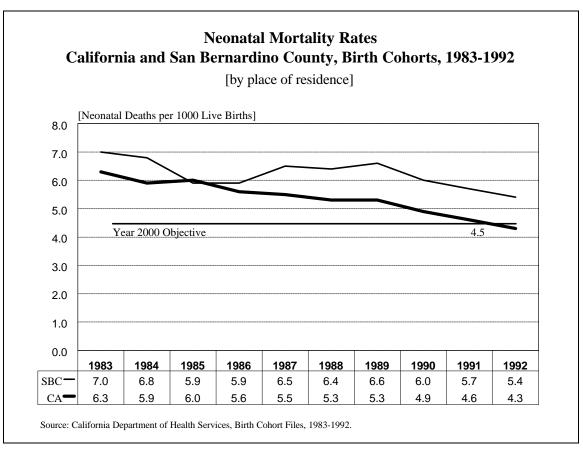


Figure 5

Neonatal Mortality by Race/Ethnicity of Mother

Year 2000 Objective: Reduce the black neonatal mortality rate to no more than 7.0 per 1,000 live births.

1992 Black Neonatal Mortality Rates: San Bernardino County 10.5

California 10.3

The relatively small number of neonatal deaths at the county level was reflected in the variability of the rates for all three race/ethnicity groups (Figures 6 through 8). The highest black neonatal mortality rate for both California and San Bernardino County was in 1983 (Figure 6). No trend is obvious for the County black rates. The State rates, however, appear to be declining.

San Bernardino County's Hispanic neonatal rate was the same as the State rate in 1992 (Figure 7). Both had a rate of 4.0 in 1992, marking the end of a three-year decline. The State clearly experienced a downward trend over the review period. The County's rates vary too much to draw any conclusion regarding a trend, although the 1992 rate of 4.0 is nearly 17 percent lower than the 1983 rate of 4.8. The white neonatal rates for both the County and State were substantially lower in 1992 than 1983 (Figure 8). Downward trends are obvious for both California and San Bernardino County neonatal rates among whites. Neonatal deaths and mortality rates, by race/ethnicity are shown in Table 3.

Table 3
Neonatal Deaths and Neonatal Mortality Rates by Race/Ethnicity of Mother
California and San Bernardino County, 1983-1992

Year		Ne	onatal Deatl	hs			Neona	atal Mortality	Rate	
	Total	Black	Hispanic	White	Other	Total	Black	Hispanic	White	Other
California										
1983	2,748	452	734	1,318	244	6.3	12.4	5.6	5.9	5.6
1984	2,657	415	750	1,210	282	5.9	10.8	5.5	5.3	6.2
1985	2,841	434	843	1,273	291	6.0	10.9	5.7	5.4	6.2
1986	2,716	459	808	1,203	246	5.6	11.1	5.2	5.1	5.1
1987	2,794	479	840	1,209	266	5.5	11.1	5.1	5.0	5.1
1988	2,805	512	882	1,147	264	5.3	11.3	4.8	4.6	4.6
1989	3,003	534	1,030	1,159	280	5.3	11.2	4.9	4.6	4.9
1990	2,989	465	1,146	1,131	247	4.9	9.6	4.7	4.4	4.0
1991	2,817	434	1,164	987	232	4.6	9.3	4.5	4.1	3.7
1992	2,603	469	1,060	829	245	4.3	10.3	4.0	3.6	3.9
San Bernar	dino Coun	ty								
1983	134	20	22	76	16	7.0	15.1	4.8	6.5	10.9
1984	135	14	26	84	11	6.8	9.4	5.5	6.6	10.9
1985	126	18	25	74	9	5.9	11.2	4.7	5.5	9.0
1986	133	22	33	76	2	5.9	12.0	5.7	5.4	2.0
1987	167	28	41	88	10	6.5	12.9	6.0	5.7	9.0
1988	179	30	36	100	13	6.4	12.0	4.5	6.2	10.0
1989	201	36	63	92	10	6.6	12.9	6.6	5.5	6.8
1990	202	37	57	95	13	6.0	12.9	5.2	5.3	8.2
1991	188	37	62	76	13	5.7	11.9	4.9	4.9	7.6
1992	176	33	53	64	26	5.4	10.5	4.0	4.3	14.3

Note: Rates calculated with fewer than 20 events are unreliable and should be interpreted with caution.

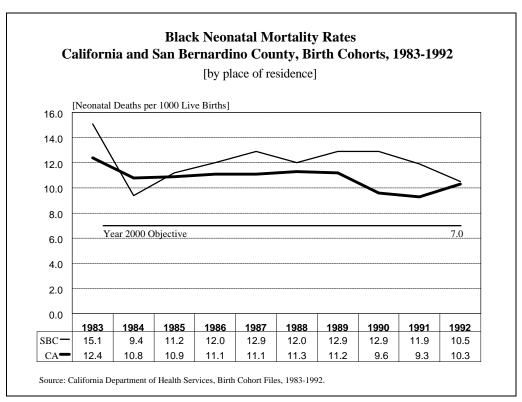


Figure 6

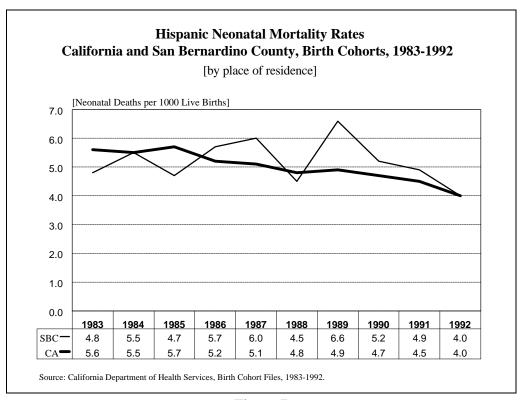


Figure 7

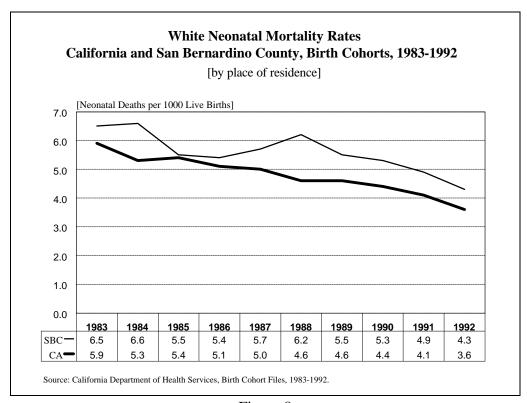


Figure 8

Postneonatal Mortality

Year 2000 Objective: Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.

1992 Postneonatal Mortality Rates: San Bernardino County 3.5 California 2.7

San Bernardino County experienced higher postneonatal mortality rates than the State of California each year of the review period (Figure 9). California's rates are approaching the Year 2000 Objective of 2.5. The County trend is not so clear, but the 1992 rate of 3.5 is 12.5 percent below the 1983 rate of 4.0.

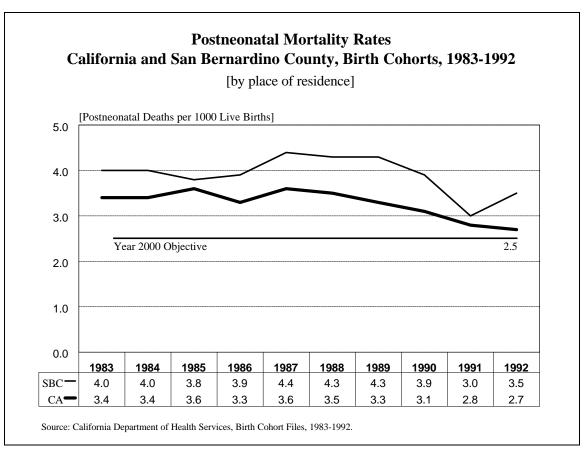


Figure 9

Postneonatal Mortality by Race/Ethnicity of Mother

Year 2000 Objective: Reduce postneonatal mortality among blacks to no more than 4 per 1,000 live births.

1992 Black Postneonatal Mortality Rates: San Bernardino County 4.5 California 5.3

During the ten-year review period the San Bernardino County postneonatal mortality rate for blacks varied significantly from a low of 2.7 in 1984 to a high of 9.7 just three years later, in 1987 (Figure 10). This amount of variation is not surprising given there were never more than 21 deaths for any year (Table 4). The State rate was much more stable and declined four of the last five years. Between 1983 and 1992, the State rate declined nearly 20 percent.

Both San Bernardino County's and California's postneonatal mortality rate among Hispanics declined the last four years of the review period (Figure 11). The County rate was higher than the State rate seven of the ten years. The rates among whites were higher than the State rates every year. Both the County and the State appear to have experienced downward trends between 1983 and 1992 among whites (Figure 12). Postneonatal deaths and mortality rates are shown below in Table 4.

Table 4
Postneonatal Deaths and Postneonatal Mortality Rates by Race/Ethnicity of Mother
California and San Bernardino County, 1983-1992

Year		Post	neonatal Dea	aths		Postneonatal Mortality Rate					
	Total	Black	Hispanic	White	Other	Total	Black	Hispanic	White	Other	
California											
1983	1,501	240	387	734	140	3.4	6.6	2.9	3.3	3.2	
1984	1,503	233	393	730	147	3.4	6.1	2.9	3.2	3.3	
1985	1,701	282	454	799	166	3.6	7.1	3.0	3.4	3.5	
1986	1,588	275	390	774	149	3.3	6.6	2.5	3.3	3.1	
1987	1,800	313	467	842	178	3.6	7.2	2.8	3.5	3.4	
1988	1,864	325	567	797	175	3.5	7.2	3.1	3.2	3.1	
1989	1,907	325	612	786	184	3.3	6.8	2.9	3.1	3.2	
1990	1,870	312	651	726	181	3.1	6.5	2.7	2.8	2.9	
1991	1,726	288	656	624	158	2.8	6.1	2.5	2.6	2.5	
1992	1,626	240	641	582	163	2.7	5.3	2.4	2.5	2.6	
San Bernard	lino County										
1983	76	5	18	51	2	4.0	3.8	3.9	4.4	1.4	
1984	79	4	12	55	8	4.0	2.7	2.5	4.3	7.9	
1985	81	9	15	55	2	3.8	5.6	2.8	4.1	2.0	
1986	89	12	13	59	5	3.9	6.6	2.2	4.2	5.1	
1987	112	21	22	62	7	4.4	9.7	3.2	4.0	6.3	
1988	121	19	35	62	5	4.3	7.6	4.4	3.8	3.8	
1989	132	17	32	78	5	4.3	6.1	3.4	4.6	3.4	
1990	131	17	36	69	9	3.9	5.9	3.3	3.8	5.7	
1991	100	20	35	43	2	3.0	6.4	2.8	2.7	1.2	
1992	114	14	35	57	8	3.5	4.5	2.7	3.9	4.4	

Note: Rates calculated with fewer than 20 events are unreliable and should be interpreted with caution.

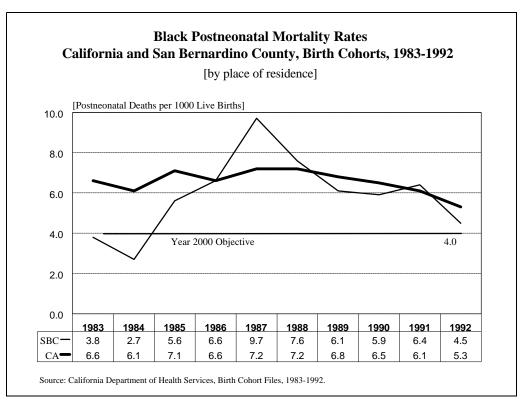


Figure 10

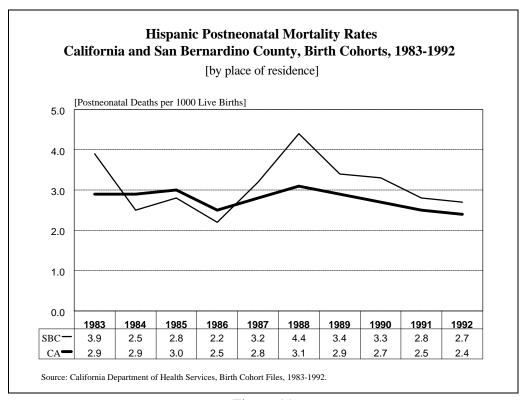


Figure 11

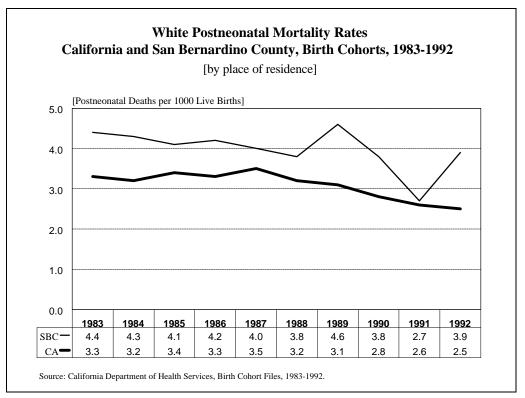


Figure 12

Year 2000 Objective: Reduce the fetal death rate (20 or more weeks gestation) to no

more than 5 per 1,000 live births plus fetal deaths.

1992 Fetal Death Rate: San Bernardino County 6.1

California 6.1

The number of fetal deaths, 20 weeks or more gestation, and fetal death rates for California and San Bernardino County are shown in Table 5. Fetal death rates are calculated by dividing the number of fetal deaths by the number of live births plus fetal deaths, then multiplying by 1,000.

In three of the years between 1983 and 1992, the fetal death rate for San Bernardino County was the same as the California rate (Figure 13). The County rate was 9.0 percent lower in 1992 than 1983, while the State rate dropped by 11.6 percent over the same time period. The variability of the County rate makes it difficult to identify a trend. Fetal death rates for the State, however, appear to be on a downward trend.

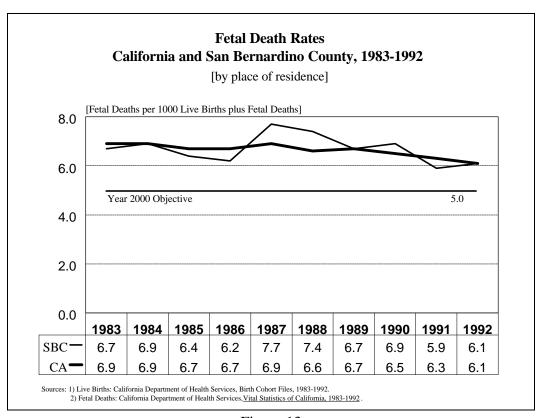


Figure 13

Table 5
Fetal Deaths and Fetal Death Rates
California and San Bernardino County, 1983-1992

		Year											
Event/Rate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992			
California													
Fetal Deaths	3,049	3,110	3,171	3,259	3,504	3,527	3,824	3,989	3,834	3,704			
Fetal Death Rate	6.9	6.9	6.7	6.7	6.9	6.6	6.7	6.5	6.3	6.1			
San Bernardino Cou	inty												
Fetal Deaths	128	139	136	142	197	208	205	233	196	201			
Fetal Death Rate	6.7	6.9	6.4	6.2	7.7	7.4	6.7	6.9	5.9	6.1			

²⁾ Fetal Deaths: California Department of Health Services, <u>Vital Statistics of California</u>, 1983-1992.

LOW BIRTHWEIGHT LIVE BIRTHS

Year 2000 Objective: Reduce low birthweight to an incidence of no more than 5.0

percent of live births.

1992 Low Birthweight: San Bernardino County 6.5

California 5.9

Low birthweight (LBW) is a live birth weighing 2,499 grams (5 pounds, 8 ounces) or less.

San Bernardino County's incidence of LBW was higher than California's rate every year except 1986, when the rates were the same (Figure 14). The County rate was slightly higher in 1992 (6.5) than 1983 (6.2) and the State rate was 5.9 the first and last year of the review period. There is no evidence that either the County or the State is moving toward the Year 2000 Objective in this area.

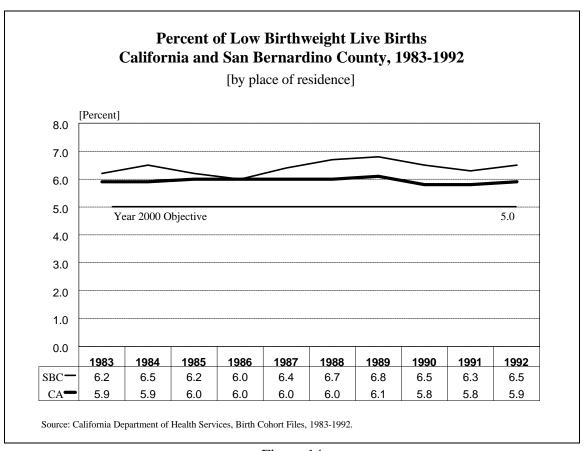


Figure 14

Low Birthweight by Race/Ethnicity of Mother

Year 2000 Objective: Reduce the incidence of low birthweight among blacks to no

more than 9.0 percent.

Low Birthweight Among Blacks: San Bernardino County 12.5

California 12.8

The incidence of LBW among blacks in San Bernardino County was lower than the corresponding California rate each year of the review period (Figure 15). The County trend appears to be moving away from the Year 2000 Objective of 9.0. Between 1983 and 1992 the County rate increased 17.9 percent compared to 4.1 percent for the State.

Both the County and State incidence of LBW among Hispanic and white mothers was fairly level over the entire review period (Figures 16 and 17). County rates for Hispanic and whites were higher than the State rates every year except 1991, when the rate among Hispanics was equal to the State rate. Number and percent of low birthweight live births are show below in Table 6.

Table 6
Number and Percent of Low Birthweight Live Births by Race/Ethnicity of Mother
California and San Bernardino County, 1983-1992

		Year												
Race/Ethnicity	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992				
				NUM	BER									
California														
Total	25,870	26,539	28,371	28,806	30,437	32,051	34,783	35,474	35,380	35,687				
Black	4,486	4,837	5,056	5,332	5,775	6,207	6,586	6,026	5,938	5,811				
Hispanic	6,847	7,163	8,089	8,167	8,820	9,520	11,284	12,732	13,359	13,990				
White	11,910	11,823	12,385	12,381	12,656	12,855	13,373	12,972	12,182	11,883				
San Bernardino														
County														
Total	1,180	1,303	1,314	1,355	1,645	1,867	2,093	2,177	2,081	2,140				
Black	140	184	171	201	250	305	351	323	382	392				
Hispanic	266	280	338	330	409	514	587	662	656	757				
White	676	770	753	763	913	966	1,054	1,078	929	860				
				PERC	ENT									
California														
Total	5.9	5.9	6.0	6.0	6.0	6.0	6.1	5.8	5.8	5.9				
Black	12.3	12.6	12.7	12.9	13.4	13.7	13.8	12.5	12.7	12.8				
Hispanic	5.2	5.2	5.4	5.2	5.3	5.2	5.3	5.2	5.2	5.3				
White	5.3	5.2	5.3	5.2	5.2	5.2	5.3	5.1	5.0	5.2				
San Bernardino														
County														
Total	6.2	6.5	6.2	6.0	6.4	6.7	6.8	6.5	6.3	6.5				
Black	10.6	12.3	10.6	11.0	11.5	12.2	12.6	11.3	12.3	12.5				
Hispanic	5.8	5.9	6.3	5.7	6.0	6.4	6.2	6.0	5.2	5.8				
White	5.8	6.1	5.6	5.5	5.9	6.0	6.3	6.0	5.9	5.8				

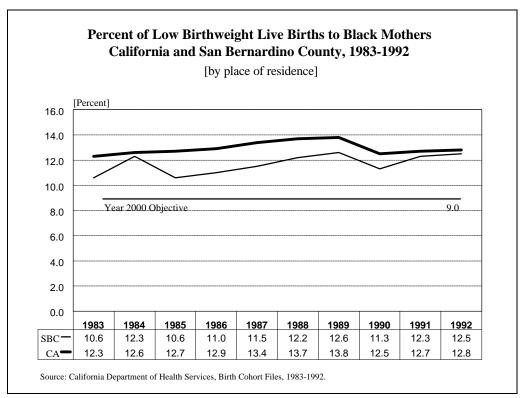


Figure 15

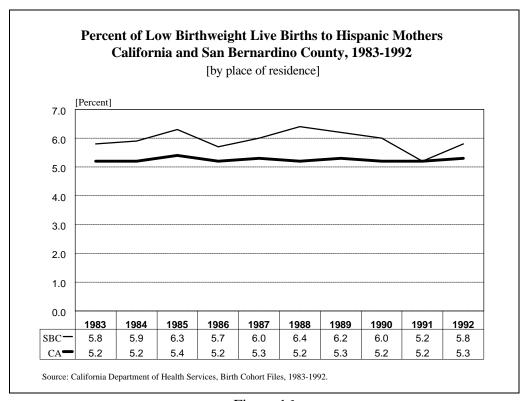


Figure 16

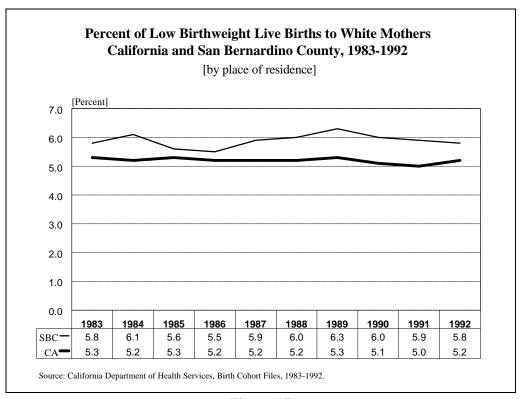


Figure 17

VERY LOW BIRTHWEIGHT LIVE BIRTHS

Year 2000 Objective: Reduce very low birthweight to an incidence of no more than 1.0 percent of live births.

1992 Incidence of Very Low Birthweight: San Bernardino County 1.2

California 1.0

Very low birthweight (VLBW) is a live birth weighing 1,499 grams (3 pounds, 5 ounces) or less.

The percentage of VLBW live births in California was at 1.0 six years of the ten-year review period. San Bernardino County's percentage of VLBW live births was higher than the State rates nine of the ten years, and was higher the last half of the review period than the first half (Figure 18).

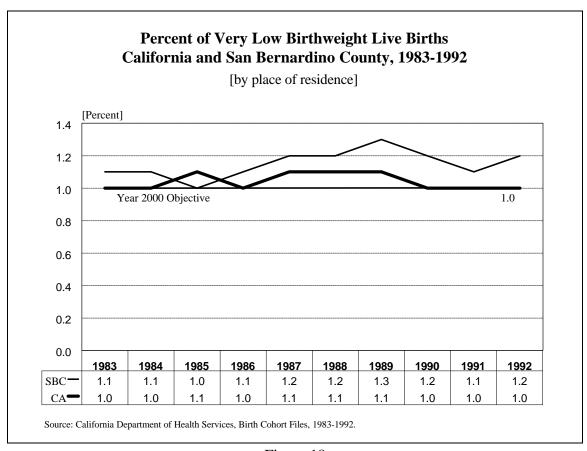


Figure 18

Very Low Birthweight by Race/Ethnicity of Mother

Year 2000 Objective: Reduce very low birthweig more than 2.0 percent.	ght among blacks to an inciden	ace of no
1992 Very Low Birthweight Among Blacks:	San Bernardino County California	3.3 2.9

The incidence of VLBW among blacks in San Bernardino County moved away from the Year 2000 Objective (Figure 19). The 1992 percentage of 3.3 is 43.5 percent higher than the 1983 rate of 2.3. The rate for California, by comparison, increased only 11.5 percent over the same ten-year period.

Among California Hispanics the rate was constant at 0.9, nine of the ten years (Figure 20). San Bernardino County's rate fluctuated between 0.8 and 1.3 over the same period. Except for 1985 and 1986, the County rate of VLBW among whites was higher than the State each year (Figure 21). Very low birthweight live births, by race/ethnicity of mother, for California and San Bernardino County are shown below in Table 7.

Table 7

Number and Percent of Very Low Birthweight Live Births by Race/Ethnicity of Mother
California and San Bernardino County, 1983-1992

		Year												
Race/Ethnicity	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992				
				NUM	BER									
California														
Total	4,517	4,583	5,094	4,984	5,444	5,608	6,080	6,152	6,241	6,279				
Black	953	1,028	1,066	1,131	1,234	1,357	1,408	1,275	1,255	1,32				
Hispanic	1,203	1,223	1,422	1,409	1,555	1,597	1,960	2,204	2,329	2,402				
White	1,989	1,932	2,150	2,052	2,220	2,142	2,194	2,136	2,120	1,97				
San Bernardino														
County														
Total	212	219	208	239	304	328	404	387	374	40:				
Black	30	28	35	52	50	66	75	82	87	104				
Hispanic	41	54	45	53	79	80	126	112	111	124				
White	122	125	112	130	160	164	180	178	155	149				
				PERC	ENT									
California														
Total	1.0	1.0	1.1	1.0	1.1	1.1	1.1	1.0	1.0	1.0				
Black	2.6	2.7	2.7	2.7	2.9	3.0	3.0	2.6	2.7	2.9				
Hispanic	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9				
White	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9				
San Bernardino														
County														
Total	1.1	1.1	1.0	1.1	1.2	1.2	1.3	1.2	1.1	1.3				
Black	2.3	1.9	2.2	2.8	2.3	2.6	2.7	2.9	2.8	3.				
Hispanic	0.9	1.1	0.8	0.9	1.2	1.0	1.3	1.0	0.9	0.				
White	1.0	1.0	0.8	0.9	1.0	1.0	1.1	1.0	1.0	1.				

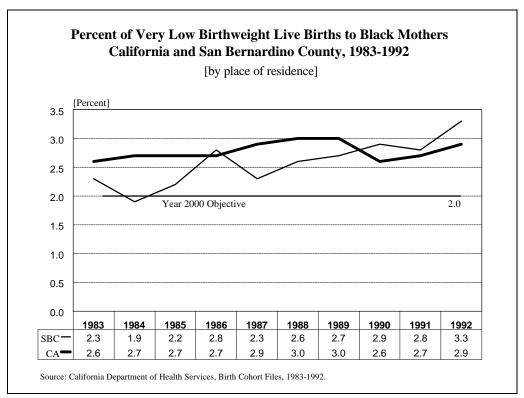


Figure 19

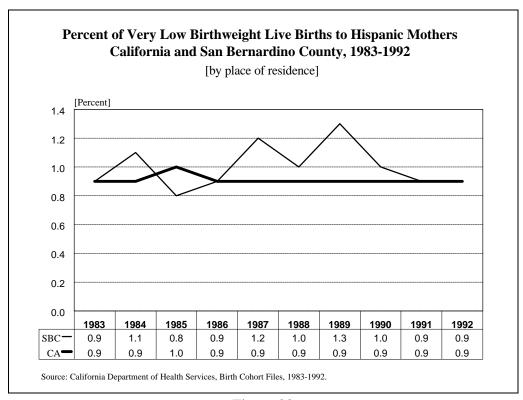


Figure 20

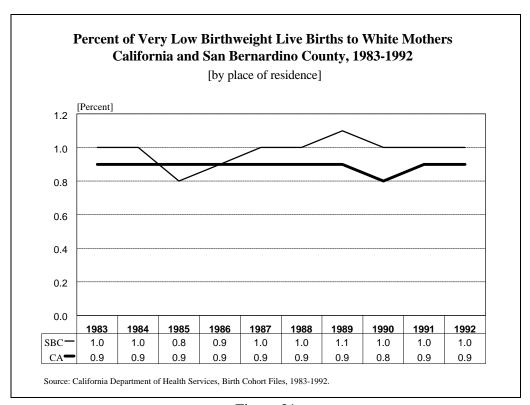


Figure 21

VERY LOW BIRTHWEIGHT LIVE BIRTHS DELIVERED AT TERTIARY LEVEL HOSPITALS

Year 2000 Objective: Increase to at least 90 percent the proportion of very low birthweight infants born in tertiary level (III) hospitals.

The California Children's Services (CCS), designates hospitals into one of three levels: Level I (primary) for low risk; Level II (intermediate); and Level III (tertiary) for high risk. A list of Level III hospitals in 1990 as designated by CCS is shown in Table 8 on the following page. (Note: The analysis in this section is based on CCS's 1990 classification. The classification of one or more of these facilities may have been different during other years of the review period.)

Both the State of California and San Bernardino County are far from achieving the Year 2000 Objective (Figure 22). In fact, both appear to be on a trend moving away from the objective. The number of VLBW infants delivered at tertiary hospitals for the ten-year review period are shown in Table 9.

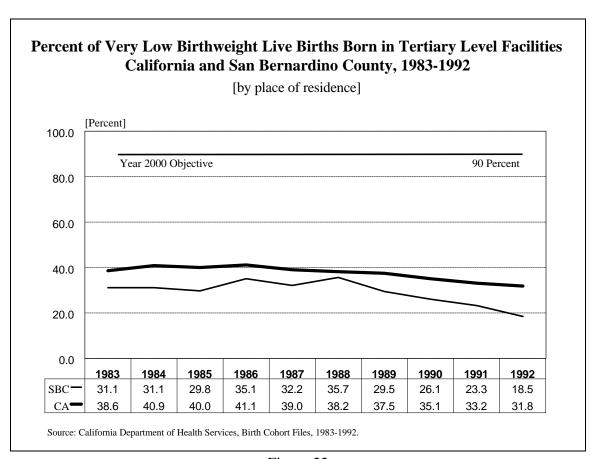


Figure 22

Table 8
Tertiary Level (III) Facilities
California, 1990

Hospital/Facility	Location
California Pacific Medical Center	San Francisco
Cedars Sinai Medical Center	Los Angeles
Children's Hospital	Oakland
Huntington Memorial Hospital	Pasadena
Kaiser Hospital: Sunset	Los Angeles
Kaiser Hospital	Oakland
Kaiser Hospital	San Francisco
Loma Linda University Hospital	Loma Linda
Los Angeles County Harbor/UCLA Medical Center	Torrance
Los Angeles County King/Drew Medical Center	Los Angeles
Los Angeles County U.S.C. Medical Center	Los Angeles
Memorial Hospital Medical Center	Long Beach
Mt. Zion Hospital and Medical Center	San Francisco
Santa Clara Valley Medical Center	San Jose
Stanford University Hospital	Palo Alto
Sutter Memorial Hospital	Sacramento
U.C.L.A. Medical Center	Los Angeles
U.C.S.F. Hospitals and Clinics	San Francisco
U.C. Irvine Medical Center	Orange
U.C. Sacramento Medical Center	Sacramento
University Hospital - U.C.S.D. Medical Center	San Diego
White Memorial Medical Center	Los Angeles

Source: 1986-1990 Maternal and Child Health Database Descriptive Narrative.

Table 9 Very Low Birthweight Live Births Delivered at Tertiary Care (Level III) Facilities California and San Bernardino County, 1983-1992

					Ye	ar				
Event/Rate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
California										
Number Delivered at Level III	1,742	1,876	2,037	2,047	2,122	2,142	2,282	2,160	2,070	1,999
Total VLBW Live Births	4,517	4,583	5,094	4,984	5,444	5,608	6,080	6,152	6,241	6,279
Percent	38.6	40.9	40.0	41.1	39.0	38.2	37.5	35.1	33.2	31.8
San Bernardino County										
Number Delivered at Level III	66	68	62	84	98	117	119	101	87	75
Total VLBW Live Births	212	219	208	239	304	328	404	387	374	405
Percent	31.1	31.1	29.8	35.1	32.2	35.7	29.5	26.1	23.3	18.5

ENTRY INTO PRENATAL CARE

Year 2000 Objective: Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

1992 Women Receiving 1st Trimester Care: San Bernardino County
California
73.5

Neither San Bernardino County nor the State of California show a clear trend toward achieving the Year 2000 Objective in this area (Figure 23). The County rates are consistently, slightly lower than the State rates. County and State rates were lower in 1992 than 1983.

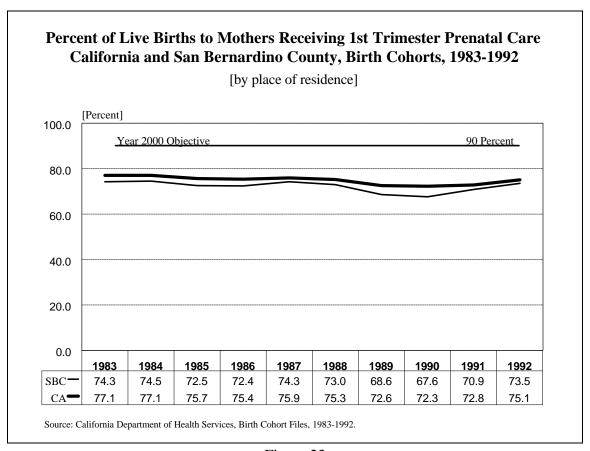


Figure 23

Entry Into Prenatal Care by Race/Ethnicity of Mother

Year 2000 Objective: Increase to at least 90 percent the proportion of black and

Hispanic women who receive prenatal care in the first trimester

of pregnancy.

1992 Percent of Black Women Receiving Prenatal Care in the First Trimester:

San Bernardino County 71.9 California 72.4

1992 Percent of Hispanic Women Receiving Prenatal Care in the First Trimester:

San Bernardino County 65.4 California 65.5

The percent of San Bernardino County black mothers receiving first trimester prenatal care is similar to California black mothers (Figure 24). Neither group shows evidence of approaching the Year 2000 Objective. Hispanic mothers in California and the County had slightly lower proportions of mothers receiving first trimester care compared to either black or white mothers. County and State Hispanic rates were similar (Figure 25).

The greatest difference between County and State figures were for white mothers (Figure 26). San Bernardino County rates were consistently lower than the State rates among whites. Among the three race/ethnicity groups studied, the whites had the highest rate of mothers receiving prenatal care in the first trimester of pregnancy (Table 10).

Table 10 Number and Percent of Live Births to Mothers Receiving First Trimester Prenatal Care California and San Bernardino County, 1983-1992

					Yea	ır				
Race/Ethnicity	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
				NUMBI	ER					
California										
Total	328,006	336,404	348,505	356,858	376,511	395,425	410,125	438,407	439,747	447,341
Black	25,705	26,706	26,649	27,813	29,328	30,593	31,569	32,376	32,447	32,593
Hispanic	85,003	89,122	95,241	98,228	106,563	115,319	127,180	147,064	157,071	170,709
White	184,994	187,232	191,970	194,914	201,404	205,848	208,058	212,466	202,970	194,513
San Bernardino County										
Total	13,972	14,676	15,221	16,105	18,609	20,193	20,869	22,506	23,321	23,965
Black	912	1,012	1,069	1,214	1,470	1,746	1,707	1,794	2,103	2,242
Hispanic	2,959	3,189	3,442	3,695	4,549	5,079	5,579	6,247	7,689	8,490
White	9,012	9,753	10,030	10,521	11,835	12,459	12,584	13,337	12,242	11,860
				PERCE	NT					
California										
Total	77.1	77.1	75.7	75.4	75.9	75.3	72.6	72.3	72.8	75.1
Black	72.4	71.4	68.5	68.4	69.0	68.8	67.0	68.0	70.1	72.4
Hispanic	66.6	67.0	65.4	64.1	65.3	64.0	60.6	60.5	61.6	65.5
White	83.9	84.1	83.2	83.6	84.0	83.9	82.8	83.3	84.2	85.6
San Bernardino County										
Total	74.3	74.5	72.5	72.4	74.3	73.0	68.6	67.6	70.9	73.5
Black	69.8	68.4	67.1	67.4	69.3	70.5	61.3	63.0	68.0	71.9
Hispanic	65.9	68.0	65.5	64.5	68.5	64.5	58.8	56.8	61.7	65.4
White	78.0	77.7	76.1	76.5	77.7	77.6	75.3	74.5	78.4	80.8

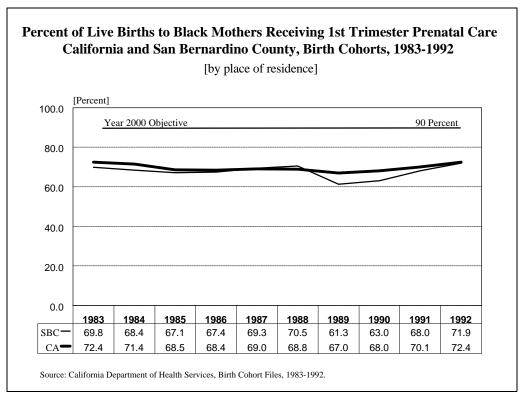


Figure 24

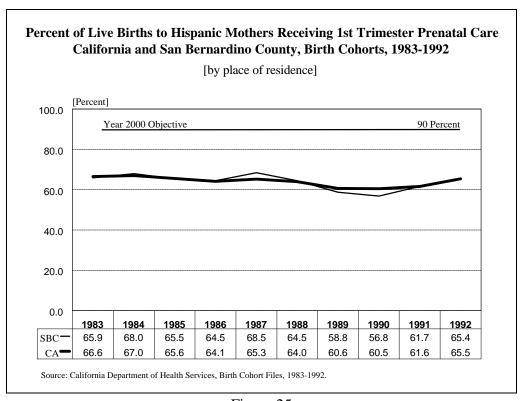


Figure 25

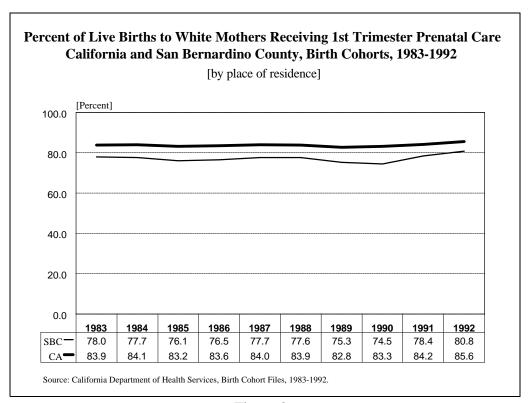


Figure 26

MATERNAL MORTALITY

1983-1993 Maternal Mortality:

Year 2000 Objective: Reduce the maternal mortality rate to no more than 3.3 per 100,000 live births. (ICD-9: 630.0-676.9)

San Bernardino County 8.4 California 8.0

Given the relatively small number of maternal deaths at the County level it is difficult to draw conclusions about trends (Figure 27). Even in a State the size of California, the number of maternal deaths are small enough to cause a fair amount of variation in the data (Table 11).

Two of the ten years San Bernardino County had no maternal deaths reported. In 1992, there were seven. The Year 2000 Objective is not a reliable measure for local use due to the small number of maternal deaths. The maternal mortality rate for the entire review period was 8.0 per 100,000 live births for California and 8.4 for San Bernardino County. Both rates are more than twice the Year 2000 goal of 3.3 per 100,000 live births.

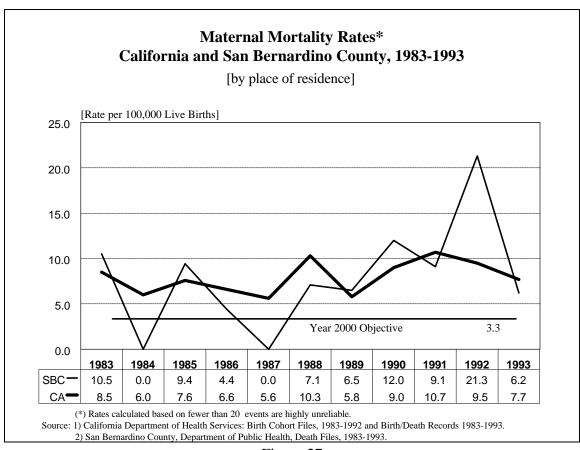


Figure 27

Table 11 **Number and Rates of Maternal Mortality** California and San Bernardino County, 1983-1993

Event/Rate	Year										
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
California											
Number	37	27	36	32	28	55	33	55	65	57	45
Rate/100,000 Live Births	8.5	6.0	7.6	6.6	5.6	10.3	5.8	9.0	10.7	9.5	7.7
San Bernardino County											
Number	2	0	2	1	0	2	2	4	3	7	2
Rate/100,000 Live Births	10.5	0.0	9.4	4.4	0.0	7.1	6.5	12.0	9.1	21.3	6.2

^(*) Rates calculated with fewer than 20 events are highly unreliable.

Sources: 1) California Department of Health Services, Birth Cohort Files, 1983-1992.
2) California Department of Health Services, Death Records, 1983-1993; Birth Records, 1993.

³⁾ San Bernardino County, Department of Public Health, Death Files, 1983-1993.

UNINTENTIONAL INJURIES TO PERSONS UNDER TWENTY-FIVE

Year 2000 Objective: Reduce deaths among children and youth through age 24 caused by unintentional injuries by at least 15 percent.

(ICD-9: E800.0-E949.9)

1993 Rate of Unintentional Injuries: San Bernardino County 22.9/100,000

California 18.6/100,000

Since the Year 2000 Objective did not specify a rate, the 1990 rate was selected as a baseline. Using 1990 data as a baseline for California and San Bernardino County, the goals become 20.4 and 23.5 per 100,000 population, respectively. The State and County rates in this area have been on a downward trend for several years (Figure 28). Both California and the State have met the Year 2000 goal using 1990 as a baseline. (1983 and 1984 California data was not available for this age-group.) The annual number of injury deaths in California and San Bernardino County are presented in Table 12.

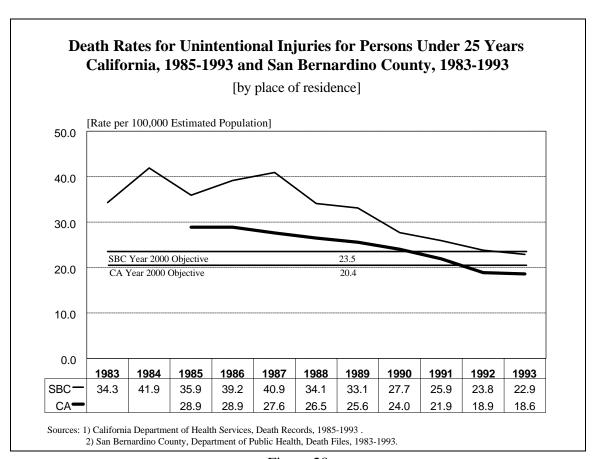


Figure 28

Table 12
Deaths and Mortality Rates For Unintentional Injuries to Persons Under Twenty-Five California, 1985-1993 and San Bernardino County, 1983-1993

		Year										
Event/Rate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
California												
Deaths	NA	NA	3,047	3,089	2,999	2,923	2,866	2,730	2,531	2,218	2,227	
Rate/100,000	NA	NA	28.9	28.9	27.6	26.5	25.6	24.0	21.9	18.9	18.6	
San Bernardino Co	ounty											
Deaths	150	188	167	190	209	185	190	168	163	156	156	
Rate/100,000	34.3	41.9	35.9	39.2	40.9	34.1	33.1	27.7	25.9	23.8	22.9	

NA= Not Available

Sources: 1) California Department of Health Services, Death Records (MISS), 1985-1993.

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²⁾ San Bernardino County, Department of Public Health, Death Files, 1983-1993.

³⁾ California Department of Finance, Mid-Year Population Estimates, 1980-1990; Projected Total Population of California Counties: 1990-2040, Report 93 P-3, May, 1993.

SUICIDE FOR PERSONS 15 TO 19 YEARS

Year 2000 Objective: Reduce suicides among youth aged 15 through 19 to no more

than 8.2 per 100,000 youth. (ICD-9: E950.0-959.9)

1993 Suicide Rate: San Bernardino County 8.9

California 9.8

California and San Bernardino County were above the Year 2000 Objective most years of the review period (Figure 29). The State, however, is closer to the goal of 8.2 than San Bernardino County. The number of suicide deaths for California and San Bernardino County are shown in Table 13. (Note: the number of suicide deaths for the County are relatively small. Therefore, the rates are unstable and should be interpreted with caution.)

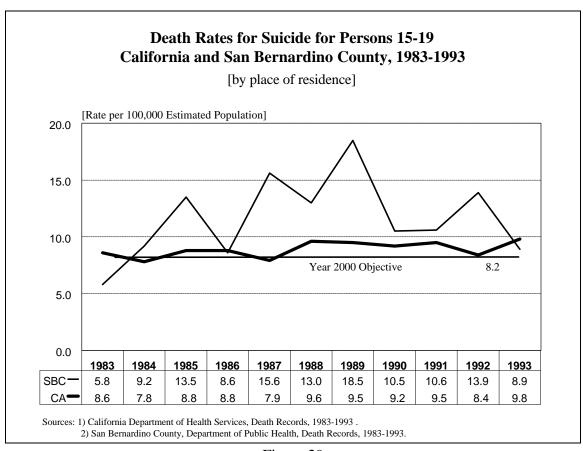


Figure 29

Table 13
Deaths and Mortality Rates For Suicides to Persons Fifteen through Nineteen
California and San Bernardino County, 1983-1993

		Year										
Event/Rate	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	
California												
Deaths	183	165	188	193	172	210	204	193	193	170	199	
Rate/100,000	8.6	7.8	8.8	8.8	7.9	9.6	9.5	9.2	9.5	8.4	9.8	
San Bernardino Co	ounty											
Deaths	5	8	12	8	15	13	19	11	11	15	10	
Rate/100,000	5.8	9.2	13.5	8.6	15.6	13.0	18.5	10.5	10.6	13.9	8.9	

Note: Rates calculated with fewer than 20 events are unreliable and should be interpreted with caution.

Sources: 1) California Department of Health Services, Death Records, 1983-1993.

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²⁾ San Bernardino County, Department of Public Health, Death Files, 1983-1993.

³⁾ California Department of Finance, Mid-Year Population Estimates, 1980-1990; Projected Total Population of California Counties: 1990-2040, Report 93 P-3, May, 1993.

SEXUALLY TRANSMITTED DISEASES

Year 2000 Objective: Reduce by at least 30 percent the proportion of youth age 12-21

who contract sexually transmitted diseases.

1994 Rates: Gonorrhea 201.3 per 100,000 youth aged 12-21

Chlamydia 742.1 per 100,000 youth aged 12-21 Syphilis 0.8 per 100,000 youth aged 12-21 PID 18.8 per 100,000 youth aged 12-21

Four sexually transmitted diseases were selected for review in this area: gonorrhea, chlamydia, syphilis (primary and secondary), and PID. (These four STD's were selected because they had sufficiently large numbers for analysis.) A specific percentage decrease, but no specific rate was suggested as a goal, so the peak rate for each disease between 1986 and 1994 was selected as a baseline. California data for this age-group was not available.

Using the peak rate of each disease as a baseline, the Year 2000 goals for gonorrhea, chlamydia, syphilis and PID become 421.5, 633.9, 12.6, and 17.0 per 100,000 estimated population, respectively. The incidence of these diseases and rates are shown in Table 14.

Using the goals as described above, San Bernardino County has already achieved the Year 2000 Objective for gonorrhea and syphilis (Figures 30 and 32). The incidence rates for both of these diseases dropped substantially the last few years of the review period.

The incidence rates for chlamydia remain higher than the Year 2000 goal of 633.9 (Figure 31). PID rates are around the Year 2000 goal of 17.0 per 100,000 population (Figure 33). Since neither chlamydia nor PID were required to be reported until mid-1989, the rates for these diseases through 1989 are not comparable to more recent years.

Table 14 Number and Incidence Rates of Selected Sexually Transmitted Diseases for Person 12-21 San Bernardino County, 1986-1994

					Year				
Disease	1986	1987	1988	1989	1990	1991	1992	1993	1994
			NUI	MBER					
Gonorrhea ¹	1,102	1,109	792	1,219	833	876	574	572	493
Chlamydia ²	550	628	546	956	1,423	1,994	1,672	1,977	1,817
Syphilis ³	14	34	22	34	27	16	9	4	2
PID, Total ⁴	11	5	1	50	33	39	33	47	46
Chlamydial PID	0	0	0	0	0	0	18	23	13
Gonococcal PID	10	4	1	8	0	6	4	11	6
PID (Other)	1	1	0	42	33	33	11	13	27
			RATE	/100,000					
Gonorrhea ¹	602.1	587.6	403.5	593.4	386.0	397.8	253.5	244.2	201.3
Chlamydia ²	300.5	332.7	278.2	465.4	659.4	905.5	738.5	844.1	742.1
Syphilis ³	7.6	18.0	11.2	16.6	12.5	7.3	4.0	1.7	0.8
PID, Total⁴	6.0	2.6	0.5	24.3	15.3	17.7	14.6	20.1	18.8
Chlamydial PID	0.0	0.0	0.0	0.0	0.0	0.0	8.0	9.8	5.3
Gonococcal PID	5.5	2.1	0.5	3.9	0.0	2.7	1.8	4.7	2.5
PID (Other)	0.5	0.5	0.0	20.4	15.3	15.0	4.9	5.6	11.0

¹Gonorrhea includes PPNG.

Notes: Resident data. Rates based on fewer than 20 events are unreliable and should be interpreted with caution.

Sources: 1)San Bernardino County, Department of Public Health, Communicable Disease Files, 1986-1994.

²Chlamydia was not required to be reported until mid-1989.

³Syphilis only includes primary and secondary cases.

⁴PID was not required to be reported until mid-1989.

California Department of Finance, Mid-Year Population Estimates, 1980-1990; Projected Total Population of California Counties: 1990-2040, Report 93 P-3, May, 1993.

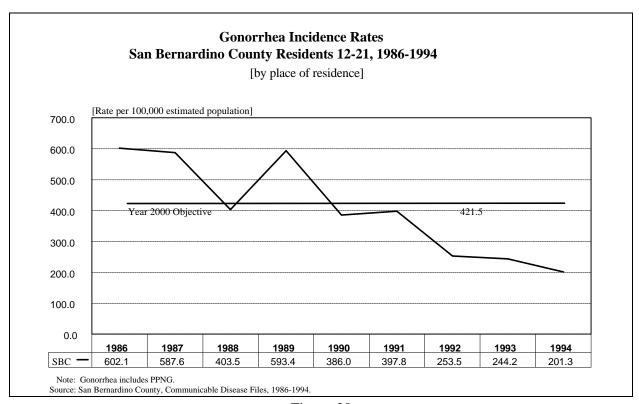


Figure 30

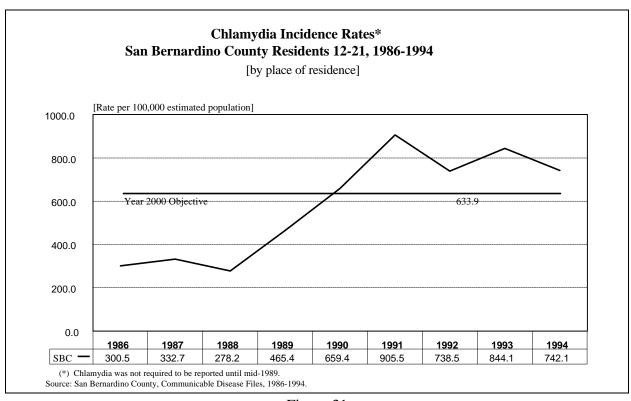


Figure 31

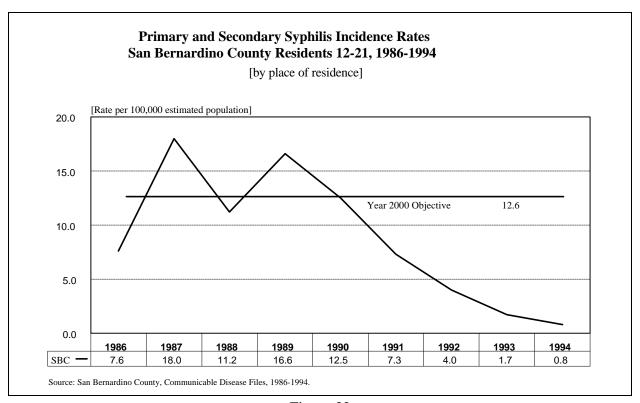


Figure 32

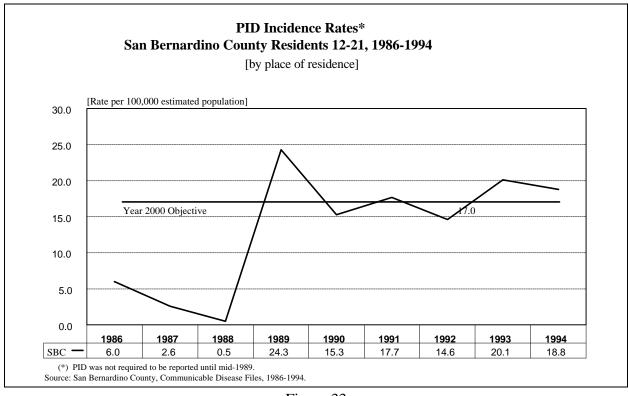


Figure 33